



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

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James S. Gilmore, III
Governor

John Paul Woodley, Jr.
Secretary of Natural Resources

COMMONWEALTH OF VIRGINIA OPERATING PERMIT

STATIONARY SOURCE PERMIT TO OPERATE

In compliance with the Federal Clean Air Act and the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution,

Virginia Power
5000 Dominion Boulevard, Glen Allen, Virginia 23060
Registration No. 70225
County-Plant No. 153-0002

is authorized to operate

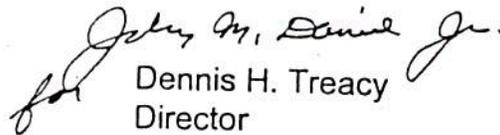
an electric power generating station

located at

19000 Possum Point Road
Dumfries, Virginia
(Prince William County)

in accordance with the Conditions of this permit and all other applicable permits and regulations of the State Air Pollution Control Board.

Approved on 9/26/00


Dennis H. Treacy
Director

Permit consists of 5 pages.
Permit Conditions 1 to 10.

PERMIT CONDITIONS - the regulatory reference and authority for the condition is listed in parentheses () after each condition.

1. This permit establishes source-specific emission standards to comply in part with the requirements of Section 110. (a)(1) of the federal Clean Air Act, which require Virginia to submit a state implementation plan which will ensure compliance with the national primary and secondary ambient air quality standard (NAAQS) for ozone and to ensure, as mandated by Section 110. (a)(2)(D)(i) of the federal Clean Air Act, that the generating station will not contribute significantly to nonattainment in, or interfere with maintenance by, any other state with respect to the NAAQS for ozone. Except to the extent that it may be more stringent, this permit does not supersede any other local, state, or federal permit, regulation or enforceable agreement, including, but not limited to any such instrument to implement the Reasonably Available Control (RACT) provisions of 9 VAC 5-40-300 and 9 VAC 5-40-310. (9 VAC 5-80-800 C.2.b of State Regulations)

2. This permit applies to the following emission units:
 - two Combustion Engineering, oil-fired utility boilers (Units #1 and #2) nominally rated at $1,000 \times 10^6$ Btu/hr heat input each;
 - one Combustion Engineering, coal-fired utility boiler (Unit #3) nominally rated at $1,150 \times 10^6$ Btu/hr heat input;
 - one Combustion Engineering, coal-fired utility boiler (Unit #4) nominally rated at $2,350 \times 10^6$ Btu/hr heat input;
 - one Combustion Engineering, oil-fired utility boiler (Unit #5) nominally rated at $8,500 \times 10^6$ Btu/hr heat input;
 - six General Electric Model MS5001L, oil-fired combustion turbines (CT#1 through #6) nominally rated at 245×10^6 Btu/hr heat input each;
 - any other oxides of nitrogen-emitting unit which provides energy utilized for electric power generation and which is located on the same property as the units above and which operates anytime during the compliance period stated in Condition 4, regardless of whether the unit exists at the time this permit is issued.

3. During each ozone season (May 1 through September 30), emissions of oxides of nitrogen (measured as NO_2) from the combined emissions units named in Condition 2 shall not exceed 0.15 pounds per million Btu's of heat (fuel) input, averaged over

every period of 30 consecutive operating days which occurs wholly within the ozone season. Compliance with this paragraph shall be demonstrated with the following equation:

$$\frac{\sum_i(\text{Actual 30-day NO}_x \text{ Emissions})}{\sum_i(\text{Actual 30-day Heat input})} \leq 0.15 \text{ lb-NO}_x/10^6 \text{ Btu}$$

where: Σ is the sum of all i units;
 i is each subject unit;

Actual 30-day NO_x Emissions are the total NO_x emissions (measured as if converted to NO₂) in pounds during any 30 consecutive operating days;

Actual 30-day Heat Input is the total heat input in millions of Btu's for the same 30-day period as the emissions data.

An operating day is any calendar day that one or more emission units operate for one hour or more.

Each 30 consecutive days period need not include any day during which there was a forced outage of a unit that is essential to maintaining compliance with the 0.15 lbs. NO_x per million Btu's cumulative average emission limit and for which total facility NO_x emissions were no more than 27 tons. For this condition, "forced outage," means an unplanned removal of a unit from service, usually resulting from mechanical, electrical, hydraulic, environmental control systems trips, malfunctions, or operator-initiated trips in response to unit alarms. There shall not be more than 14 excluded days per rolling "30-day" compliance period. This means that an acceptable "30-day" compliance period can exceed 30 calendar days, but in no event, more than 44 calendar days. The 14 excluded days allowance notwithstanding, the permittee shall make a diligent effort to return the forced outage unit to service expeditiously and minimize the number of days excluded from the rolling 30-day period over which compliance with the pounds per million Btu limit is determined. Demonstration of compliance (30-day basis) shall not be required for the year 2003 until the thirtieth operating day. Beginning with the 2004 ozone season, the last 29 days of the prior ozone season shall be used to establish the 30-day rolling average as of May 1st of the current ozone season. The method of determining the data (NO_x emissions and heat inputs) to insert into the equation above shall be in accordance with Title 40, Part 75, Appendix F, Section 8.1 of the Code of Federal Regulations (40 CFR Part 75 App.F, 8.1), except that the hourly rates determined by Section 8.1 shall be summed to give 30-day totals. The

collection of continuous emissions monitoring data from which the equation inputs are derived shall conform to 40 CFR Part 75. Compliance with the NO_x monitoring requirements for the permittee's Phase-II Acid Rain (40 CFR Part 74) permit shall be considered compliance with the monitoring requirements of this permit. NO_x emissions from the six existing combustion turbines may alternatively be determined using a DEQ-approved NO_x emission factor for simple cycle combustion turbines multiplied by the actual heat input (derived from the fuel throughput multiplied by the heating value of the fuel).

(9 VAC 5-80-800 C.2.b of State Regulations and 40 CFR 75, Appendix F, Section 8)

4. Demonstration of compliance with the requirements of Condition 3 shall be begin no later than year 2003.
(9 VAC 5-80-890 and 9 VAC 5-80-800 C.2.b of State Regulations; Section 110. (a)(1) of the federal Clean Air Act; Section 1.0 of the proposed (February 3, 2000) State Implementation Plan Revision, Phase II Attainment Plan for the Washington DC-MD-VA Nonattainment Area)
5. A report presenting the results of the monitoring for each ozone season shall be submitted to the Department of Environmental Quality (DEQ) Regional Office on or before November 15 of the same year. The first report shall include a copy of each ASTM, ASME or other methodology standard that is required to demonstrate compliance, but is not published in the Virginia or federal regulations. Any change in a standard should be presented in the first report following the change. The details of the monitoring, record keeping and reporting shall be prescribed by DEQ within 60 days following the issuance of this permit and shall be incorporated into the Title V permit. The permittee may propose details of the monitoring, record keeping and reporting to DEQ before DEQ fulfills the requirement to prescribe them within 60 days.
(9 VAC 5-40-890 and 9 VAC 5-40-900 of State Regulations)
6. Within four business hours of the beginning of any period of forced outage during the months of May through September of a unit that is essential to maintaining compliance with the 0.15 lbs NO_x per million Btu's cumulative average emission limit in Condition 3, the permittee shall notify the Northern Virginia Regional Office of the DEQ. In addition, the permittee shall provide to the Regional Air Permit Manager a written statement within 14 days, which explains the nature of the forced outage, corrective action taken, and the number of calendar days which were, or are still likely to be, excluded from the rolling 30-day compliance demonstration averages. Compliance with this reporting requirement does not relieve the facility of its obligation to continue to comply with the 0.15 lbs NO_x per million Btu's cumulative average emission limit and, if applicable, the 27 tons daily cap in Condition 3.
(9 VAC 5-20-180 of State Regulations)

7. The records kept by the permittee to comply with Condition 5. shall be available on site for inspection by the DEQ and shall be current for at least the most recent five years.
(9 VAC 5-80-900 and 9 VAC 5-80-110 F.1.b of State Regulations)
8. As an alternative to compliance with Condition 3, the permittee may comply with 40 CFR Part 97 or a regulation of the Board approved by EPA as meeting the requirements of 40 CFR Part 96. This condition may be implemented for the units covered by either of the cited regulations once they become effective. The DEQ reserves the right to amend this permit as may be necessary should it determine that use of this alternative compliance measure will prevent the attainment or maintenance of the air quality standards in the Washington, DC Ozone Nonattainment Area.
(9 VAC 5-80-800 C.1.c. of State Regulations)
9. In the event of any change in control of ownership of the permitted source, the permittee shall notify the succeeding owner of the existence of this permit by letter and send a copy of that letter to the DEQ Regional Compliance Manager.
(9 VAC 5-80-940 of State Regulations)
10. A copy of this permit shall be maintained on the premises of the facility to which it applies.
(9 VAC 5-80-860 of State Regulations)

